

Appendix

The 2002 Population estimates published here, and the 2001 estimates published previously by the Vermont Department of Health were produced by Claritas, Inc. The 2003 estimates in this publication are a slight modification of the Bridged-Race Postcensal Estimates produced for the National Center for Health Statistics by the U.S. Bureau of the Census.

The estimates provided by Claritas are typically available much sooner than estimates from other sources. However, this timeliness is not without a cost. Because these estimates are produced before up-to-date vital statistics and administrative records data are available, it is difficult to estimate small populations with much precision. Corrections are made to the estimation process as new data becomes available, but previous estimates are not recalculated. The result is wide variation from year to year in the estimates for various subpopulations within Vermont, most notably in the estimates for the youngest and oldest populations, and for some towns in Vermont. These fluctuations make planning difficult for programs and organizations which use the estimates for funding or billing for various services, and introduces increased variability into the calculation of population based rates. This prompted a search for an alternate source of population estimates with the aim of improving the accuracy, and hopefully reducing the variability in the estimates.

The Census Bureau produces annual county population estimates by age, gender, race and ethnicity as well as town total population estimates which utilize the latest available administrative records data. These estimates are not available as early as the Claritas estimates, but because more current data are used in producing them they should be more accurate. In particular, the Census Bureau's use of Medicare data ensures that the estimates of the 65 and older population are quite accurate. The Vermont Department of Health compared these estimates to those from Claritas and found them to contain much less year-to-year variability.

NCHS contracts with the Census Bureau to produce the Bridged-Race Postcensal Population estimates, which collapse the original estimates using the Census 2000 race and ethnicity categories into the categories in use prior to Census 2000, making trends analysis possible. For this reason, it was decided that the NCHS Bridged-Race estimates would be used as the starting point for the estimates which would be published by the Vermont Department of Health beginning with the 2003 estimates. Because the estimated populations for the under 5 age group were not consistent with what VDH was seeing in the vital records (birth) data, the NCHS estimates were modified slightly, resulting in the estimates published here. An explanation of the modifications follows.

The number of births in a given year should be a reasonably good estimate of the under 1 population for that year, but the number of Vermont resident births for the year ending July 1, 2003 was 6,506 while the Census/NCHS estimate of the under 1 population on July 1, 2003 was 5,861. This discrepancy prompted a closer look at the estimates for the

youngest age categories and it was decided that VDH would estimate the under 5 population by county using vital records data. A detailed explanation of the methodology used for calculating the under 5 population is available from VDH by calling 802-863-7300. The methodology for the original Census/NCHS estimates is available on the internet at <http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm>.

Because VDH estimated the under 5 population to be greater than the Census/NCHS estimate, some modifications were made to the estimates for other age groups so that county and state totals would be consistent with those published by NCHS. Because the Census/NCHS data utilize Medicare data for the 65 and older population, these were assumed to be the most accurate of the age group estimates and were not modified. Also, the 15-44 year old categories were left unchanged from the original Census/NCHS estimates because these were used in the calculation of fertility rates which were part of the VDH estimate process for the under 5 population. So, changes were made to the 5-14, and 45-64 year old age categories.

The town estimates published here are those produced by the US Census Bureau, released June 24, 2004, with a few very minor exceptions. An artifact of the process used to produce the bridged-race estimates, is that the Census/NCHS estimates had nine more people in Windsor County than the original Census Bureau estimates. So that the town estimates for Windsor County would sum to the NCHS county total, an additional person or two was added to the original estimate for the largest towns in Windsor County. Also, the Census Bureau estimated that one person lived in each of Lewis and Avery's Gore in Essex County. These places have previously been uninhabited, and VDH has received no compelling evidence to suggest that this has changed, so VDH continues to estimate zero population in these places and added those two people to the largest neighboring town, Brighton. Information about the Census Bureau's estimate methodology is available at www.census.gov.